California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair

11020 Sun Center Drive, #200, Rancho Cordova, California 95670-6114
(916) 464-3291 • FAX (916) 464-4645
http://www.waterboards.ca.gov/centralvalley

Linda S. Adams
Acting Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

FILE COPY

APPROVED
author
senior

13 April 2011

Douglas Daggs, Trustee
Sylvia Dellar Survivor's Trust
P.O. Box 971
Tahoe City, CA 96145-0987

Marty Strauss
City of Sacramento Dept. of Utilities
2812 Meadowview Road
Sacramento, CA

REVIEW OF DELLAR LANDFILL ASSESSMENT REPORT, DELLAR TRUST PROPERTY, SACRAMENTO COUNTY

The Central Valley Water Board staff has reviewed the Dellar Landfill Assessment Report submitted by the Dellar Trust in accordance with a proposed schedule agreed upon by staff during a meeting on 13 January 2011. This submittal presents information concerning soil conditions beneath the Elderberry Bushes and edge of waste assessment conducted by the Dellar Trust. The edge of waste assessment was conducted in lieu of performing an existing cap condition assessment that staff regarded as unnecessary to constructing the closure cover. Additional geotechnical work was not submitted with this report but will be reported separately at a later date.

Test pits were advanced in the vicinity of the elderberry bushes. Soil samples were collected and logged by a California Professional Geologist. One soil sample from each of the borings was submitted for analyses in accordance with the proposed Closure Field Investigation Outline dated 25 January 2011. Soil sample analytical results were compared to the San Francisco Bay Region 2, Environmental Screening Levels (ESLs) for commercial land use. All metal concentrations were reported below their respective ESL limits with the exception of Arsenic. Arsenic in all nine samples was reported above the ESL limit of 1.6 mg/kg. Concentrations ranged between 5.1 mg/kg and 12 mg/kg. However, according to the Department of Toxic Substance Control (DTSC), arsenic can be considered within background concentration if concentrations are less than or equal to 12mg/kg. Based on this finding, staff concurs that arsenic can be eliminated as a constituent of concern in soil. ESLs are considered to be conservative limits and provide a starting point to assess a potential threat found in the existing soil cover at the Dellar property.

More appropriately to guage the threat to water quality from the existing soil cover, the three highest total lead concentrations were analyzed for five soluble metals (cadmium, chromium, nickel, lead, and zinc) for soluble threshold limit concentrations (STLC) by the waste extraction test (WET) method using citric acid and de-ionized (D.I.) water. All three samples analyzed by the WET method using citric acid reported soluble lead concentrations between 15 and 45 mg/L, which exceed the STLC limit of 5 mg/L. The D.I. WET lead results, which is likely the more appropriate test for in place surface soils not exposed to an acidic environment, reported no exceedences of California Code of Regulations (CCR),Title 22 limits. All other soluble metal concentrations were reported below Title 22, STLC limits.

Additional test pits were excavated to a depth of 2 feet below ground surface adjacent to the western and southern landfill boundary's to assess the edge of waste. Debris was encountered in 21 shallow tests pits and reported to be extensive and deeper than two feet thick in several areas. Since the edge of waste has been shown to be beyond the limits previously reported, the Discharger is proposing to extend the final cover over the western and southwestern boundaries.

Based on this Landfill Assessment Report, Dellar Trust proposes to leave the elderberry bushes intact and design the landfill cover around the drip line of these protected bushes. The landfill outside of the drip lines will have a cover consisting of clean, imported soil a minimum thickness of two feet with a 3% slope. Areas within the drip lines of the Elderberry Bushes will have a lesser slope of 1% to 2%. The Dellar Trust believes the Elderberry Beetle will be delisted and that once the beetle is delisted, the bushes will be removed and the cover will be regraded to a 3% slope. In addition, Dellar Trust will design and construct the proposed closure cover over waste identified outside of the landfill footprint. Dellar Trust proposes to conduct semi-annual inspections, one prior to the wet season to verify the landfill has the appropriate erosion and sedimentation controls in place, and second inspection during or immediately after a major storm event. However, since the area beneath the Elderberry Bushes will be relatively flat additional wet season inspections will be required to identify localized ponding. What that frequency will be is likely to be determined by the amount of precipitation that falls. Nevertheless, this area of concern will require frequent visits until the portion of the cover can be brought up to grade with the landfill cover.

Based on the report, the proposed closure concept is acceptable. According to the schedule provided in the 13 January 2011 letter, the next submittal will be the Final Closure Plan with cover design specifications. This plan is scheduled to be submitted **25 April 2011**. Please call me if you have any questions at 916-464-4737.

TODD A. DEL FRATE, P.G.
Engineering Geologist
Compliance and Enforcement

cc: Patrick Palupa, Office of Chief Counsel, State Water Board, Sacramento
Frank Davies, Cal Recycle, Sacramento
Dawn Owen, Cal Recycle, Sacramento
Lisa Todd, Sacramento County Environmental Management Department, Sacramento
Gerald R. Hicks, City Attorney's Office, City of Sacramento, Sacramento
Jeffory J. Scharff, Scharff, Brady, and Vinding Attorney at Law, Sacramento